

DETAILED ACTION

Drawings

1. New corrected drawing in compliance with 37 CFR 1.121(d) is required in this application because the drawing does is not on a separate page. It is just present on the abstract page.

Specification

2. The abstract of the disclosure is objected to because it contains two paragraphs. The examiner suggests Applicant deletes the second paragraph, as it does not summarize the invention.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Denehy et al. (US 5985391).

5. Regarding claims 1 and 6:

6. Denehy et al. (hereafter Denehy) disclose a film having two skin layers and a barrier layer disposed between (col 2 ln 27-33). The center barrier layer is a barrier for a monomer of a resin composition, and may be polyamide (col 3 ln 56-65). Other volatile materials may also be impermeable to the layer (col 5 ln 8-11). The film is sheet material **10** of Fig. 3 (col 6 ln 15-20). A substrate of chopped glass fiber **24** is provided, upon which styrene resin **22** is cast (col 5 ln 61+). The styrene resin is considered to be a primer layer. The outer skin layer is functional: it can be peeled from the barrier layer (col 4 ln 4).

7. Regarding claim 2:

8. The barrier adheres to the primer via the second skin layer.

9. Regarding claim 3:

10. The skin layers comprise an adhesive to impart "adhesive properties" to the high density polyethylene and linear polyethylene also used in the layer (col5 ln58). Although Denehy teaches that the adhesive should be added to impart *low* adhesive bond

Art Unit: 4174

strength, it nonetheless bonds the barrier layer to the primer (col 3 ln 36). Therefore, the skin layer is a bonding agent layer.

11. Regarding claim 5:

12. The film may be made by co-extrusion (col 4 ln 43).

13. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Jud et al. (US 2001/0031348).

14. Jud et al. (hereafter Jud) disclose a composite film having a successive layers of polyester, aluminum foil, polyamide, and polypropylene [0002]. Each layer can be attached via adhesive, bonding agents, or a primer [0002]. Jud also discloses another embodiment of a composite film having substrate **5**, primer **7**, metal foil **1**, adhesive **8**, and functional layer **2** [0053; Fig. 1].

15. The metal foil would inherently prevent "the migration of components of the primer layer."

Claim Rejections - 35 USC § 112

16. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

17. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a foil having a substrate, primer layer, functional layer, and a barrier layer disposed between the primer and functional layers, does not

reasonably provide enablement for a barrier layer which prevents the migration of components of the primer layer and/or functional layer. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. The only guidance given by the specification regarding the composition of the barrier layer is the polymers listed in paragraph 3 of p3 and claim 6. One of ordinary skill in the art would not know how to create a barrier layer that follows Applicant's claims without undue experimentation, unless any layer comprising the listed polymers inherently provides such a barrier. Many variables, for example composition and thickness, would determine the ability of the barrier layer to function as claimed.

18. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

19. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

20. Claims 1-6 each use the term "foil" which renders the claim indefinite. The term "foil" is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term "foil" is ambiguous because it can describe either a sheet of any material, or a sheet specifically of metal.

21. Claim 1 describes a foil comprising *at least one* extruded functional layer. The claim also has a barrier layer disposed "between the primer layer and *the* extruded functional layer" [emphasis added by examiner]. It is unclear where a second functional layer would be placed.

22. The term "good properties of adhering" in claim 2 is a relative term which renders the claim indefinite. The term "good properties of adhering" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The examiner considers any barrier layer that adheres to the primer layer to have "good properties of adhering" because no standard is provided to determine what is "good."

23. The term "compatibility agent" in claims 4 and 5 is a relative term which renders the claims indefinite. The term "compatibility agent" is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear in what way the agent improves compatibility. The agent could, for example, improve adhesion compatibility between the barrier and functional layers, or improve strength compatibility (i.e. in the case where one layer can undergo greater tensile strength before rupturing than the other layer).

24. The term "increased density" in claim 6 is a relative term which renders the claim indefinite. The term "increased density" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary

skill in the art would not be reasonably apprised of the scope of the invention. No baseline density is provided, thus making it unclear which polyethylene density values would infringe upon Applicant's claim.

Conclusion

The examiner notes that while other documents cited in the International Search Report are related to the instant application, they are not pertinent at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Freeman whose telephone number is (571)270-3469. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 4174

John Freeman
Examiner
Art Unit 4174